Staphylococcal Scalded Skin Syndrome

Skin reaction caused by **exotoxin-producing strains of *Staphylococcus*** bacteria characterized by detachment of the epidermal layer leading to a **"burned/scalded" appearance**

PATHOPHYSIOLOGY

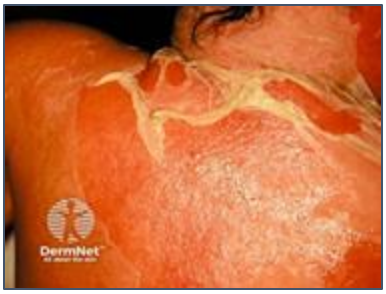
- Specific staphylococcal strains release exfoliative toxins A & B
- Toxins target the epidermal layer of the skin leading to skin detachment
- Typically follows infection from the upper respiratory tract, ears, conjunctiva, diaper areas, or umbilical stump

DIAGNOSIS

Diagnosis is mainly **clinical**

DIFFERENTIAL DIAGNOSIS

- Bullous conditions such as toxic epidermal necrolysis, Stevens-Johnson syndrome, epidermolysis bullosa, bullous impetigo, and bullous pemphigoid
- Scalding thermal burn
- Scarlet fever
- Toxic shock syndrome



https://dermnetnz.org/images/staphylococcal-scalded-skin-syndrome-images

PRESENTATION

History

- Typically affects children less than 5 years old
- May have prodrome of irritability, fever, and malaise
- 24-48 hours later, tender rash occurs

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PHYSICAL EXAM

Skin

- Erythematous, tender skin in flexural areas with progression to whole body
- Bullae and sheet-like desquamation
- Positive Nikolsky sign (rubbing of skin resulting in sloughing of outer skin layer)

Nose, eyes, mouth

- Periorbital swelling, eye discharge
- Crusting and radial fissuring around the nose and mouth may be present
- Mucosal membranes are spared

Potential complications of staphylococcal scalded skin syndrome include:

- Secondary infections (cellulitis, sepsis, pneumonia)
- Dehydration
- Electrolyte imbalances
- Hypothermia

MANAGEMENT

- Hospitalization usually required depending on symptom severity and progression
- Prompt treatment with empiric IV antibiotics:
  - **First line:** IV beta-lactams (cloxacillin) or cefazolin +/- clindamycin (to inhibit toxin synthesis)
  - If MRSA suspected → vancomycin
- Supportive therapy
  - Wound care (saline-soaked gauze)
  - Fluid & electrolyte balance
  - Nutritional support

December 2025

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